

N2130L

1976 Beech 58TC Baron

Cost of Ownership

Aircraft S/N: TK-25



Prepared by the worldwide aviation specialists at RidgeAire, Inc.



**JSSI | CONKLIN &
DE DECKER**

Aircraft Operating Cost and Performance Guide



Beechcraft Baron 58

October 29, 2022



RidgeAire, Inc.

© 2022 Conklin & de Decker Associates, Inc
167 N Green St, Suite 1300
Chicago, IL 60607

conklindedecker.jetssupport.com

Data version: V 22.2.0

Beechcraft Baron 58

RANGE:
156 nm

SPEED:
200 kts

PASSENGERS:
5 people



ACQUISITION COST:	ANNUAL COST:	VARIABLE COST:	FIXED COST:
\$680,000	\$237,072	\$445/hr	\$125,822
MAX PAYLOAD:	1,464 lb	ENGINES:	Continental Con IO-550-C 2
TOTAL CABIN VOLUME:	100 cu ft	AVIONICS:	—
WINGSPAN:	37.9 ft	APU:	—
PRODUCTION:	1970 - 2005	PRODUCED / IN SERVICE:	—
SERIAL NUMBERS:	TH1 and on	MEETS STAGE 3 NOISE LEVELS:	Yes
IFR CERTIFIED:	Yes	REGULATORY CERTIFICATION:	1969 (STC) Original type certificate issued 1957 for B95A
CERTIFICATION BASIS:	CAR 3; FAR 36 through amendment 10 FAR 23		

Assumptions

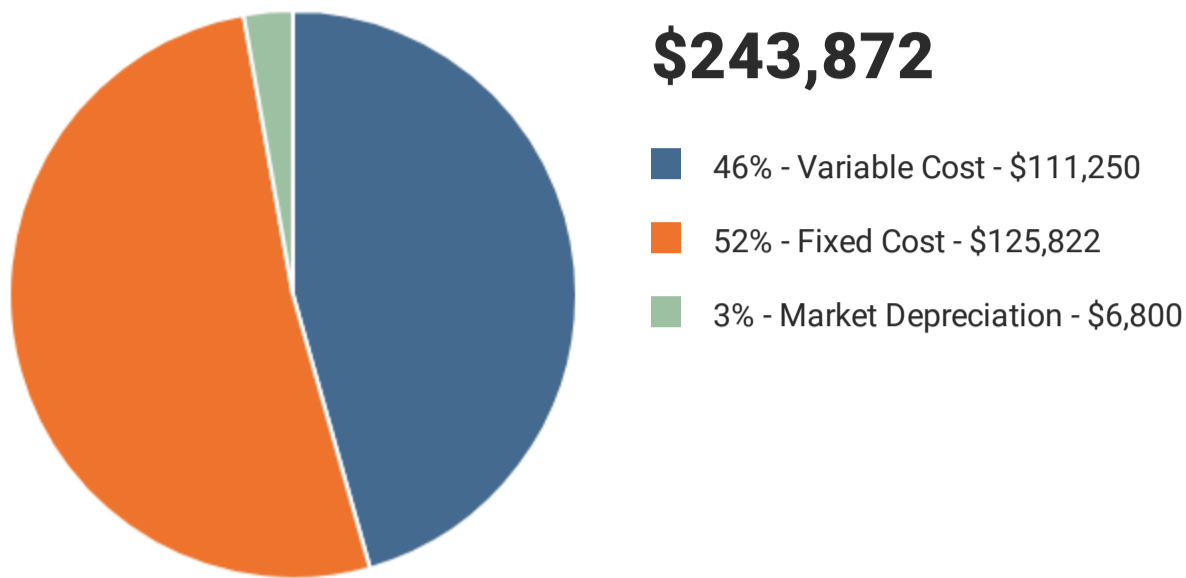
ANNUAL UTILIZATION (DISTANCE):	45,000 nm	FUEL PRICE (AVGAS):	\$6.75/gal
ANNUAL UTILIZATION (HOURS):	250 hrs	LABOR COST:	\$94/hr
AVERAGE SPEED (STANDARD TRIP):	180 kts	AVERAGE LENGTH (STANDARD TRIP):	200 nm

The Baron family shares its ancestry with the Bonanzas and includes the same landing gear and cabin as the six-place Bonanzas. The Baron 58 is a 55 model with a 10-inch fuselage stretch and 300 hp Continental engines. The Baron 58 is one of the more popular light twins, both for its utility and its image.

The cabin, although a little narrow for some, has comfortable seats, good visibility and easy loading through its aft door, plus an over-the-wing pilot's door. As far as performance is concerned, the Baron 58 has a good blend of payload and speed. The Baron 58 also has reasonable short-field performance. Over 1,800 Baron 58s have been produced.

1. Cost

Total Annual Cost With Market Depreciation

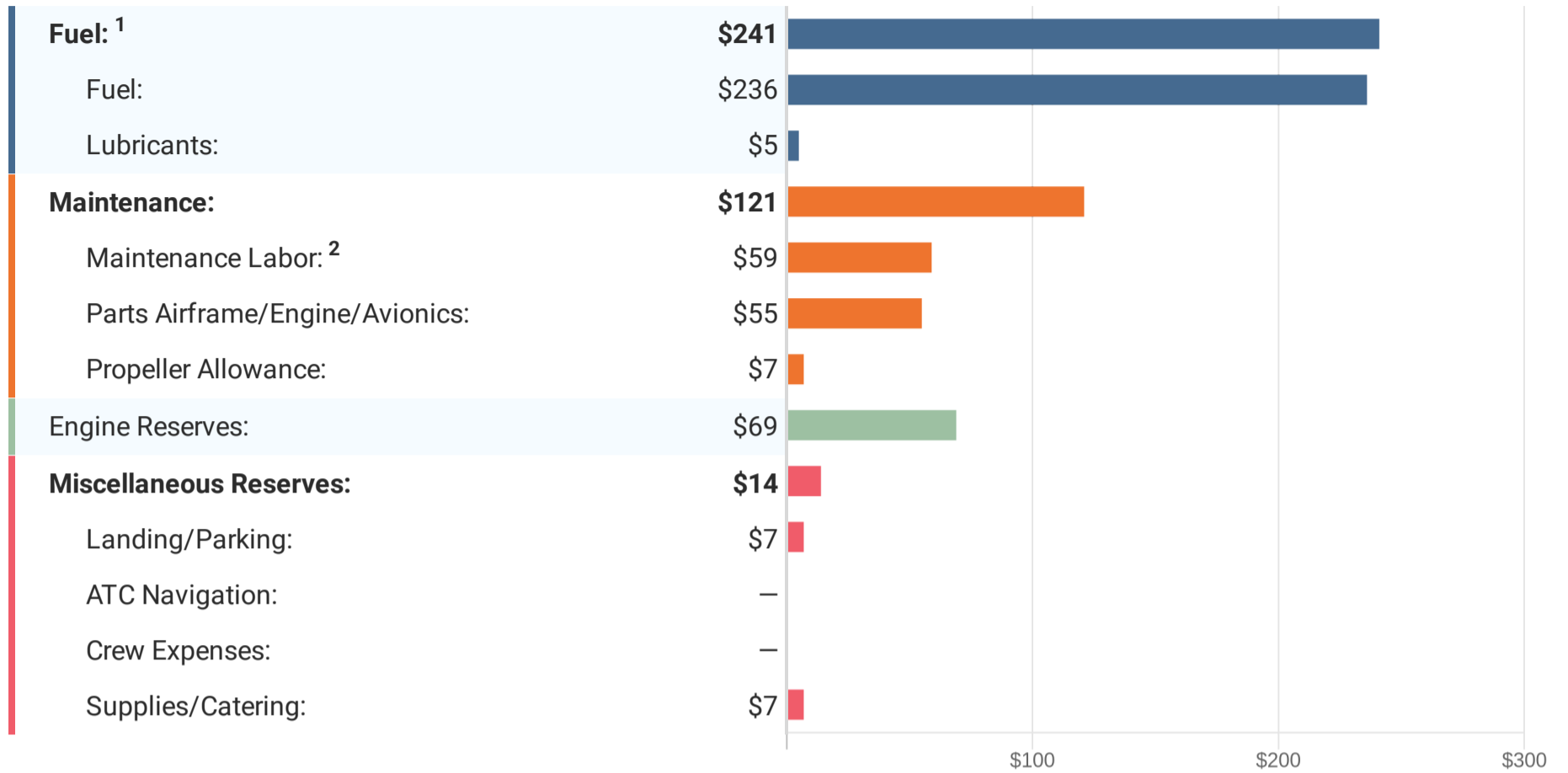


Total Annual Cost:	\$237,072
Variable Cost:	\$111,250
Fixed Cost:	\$125,822
Per Hour:	\$948
Per Nautical Mile:	\$5.27
Per Seat Per Nautical Mile:	\$1.05
Total Annual Cost with Market Depreciation:	\$243,872
Market Depreciation:	\$6,800
Per Hour:	\$975
Per Nautical Mile:	\$5.42
Per Seat Per Nautical Mile:	\$1.08

Hourly Variable Cost

PER FLIGHT HOUR:

\$445/hr



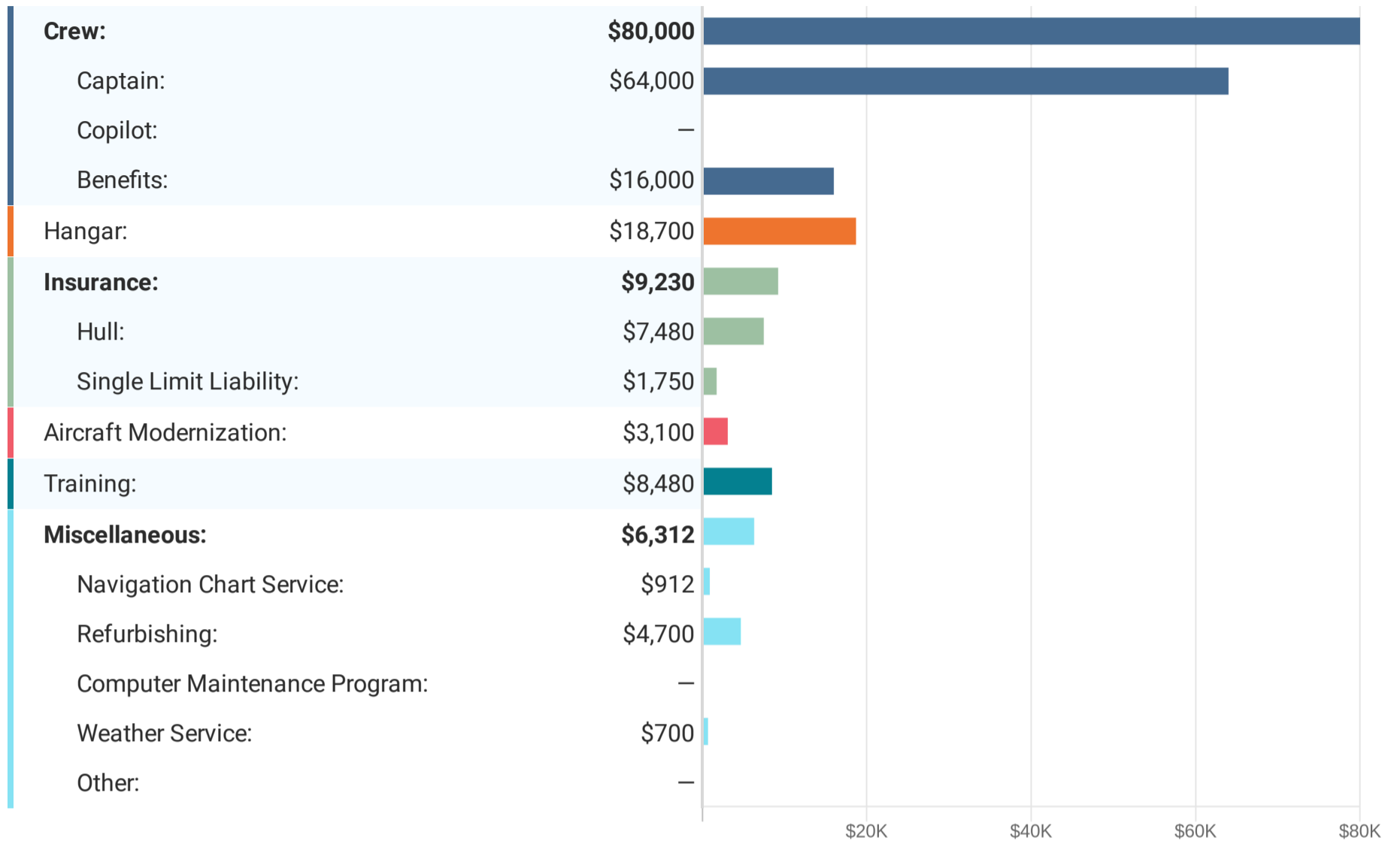
1. Fuel is calculated using Fuel Price x Fuel Burn + 15% - 35 gal/hr

2. Maintenance Labor Cost is calculated using the ratio of Maintenance Labor Hours per Flight Hour and the Labor Rate: 0.63 labor-hr/Fhr @ \$94/hr

Annual Fixed Cost

ANNUAL COST:

\$125,822



2. Performance

NORMAL CRUISE:

197 kts

LONG-RANGE CRUISE:

163 kts

MAXIMUM CRUISE:

200 kts

RATE OF CLIMB:

1,735 ft/min

MAX CERT. ALTITUDE:

—

INITIAL CRUISE ALTITUDE:

8,000 ft

TIME TO CRUISE ALTITUDE:

8 min

SERVICE CEILING:

20,688 ft

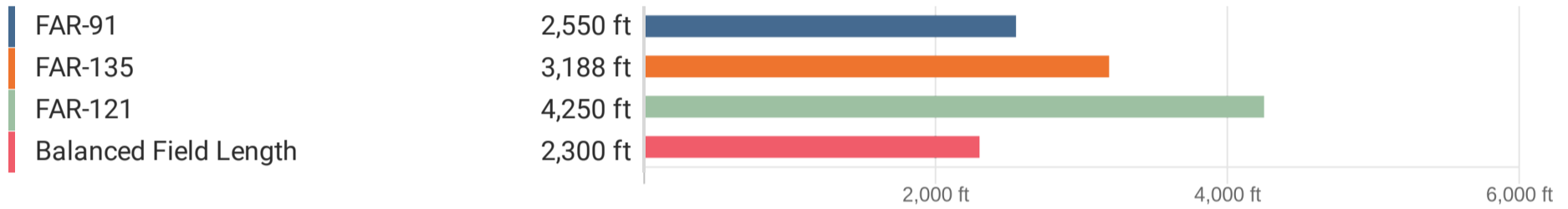
ENGINE OUT RATE OF CLIMB:

390 ft/min

ENGINE OUT CEILING:

7,284 ft

Field Length



Speeds

VMC (GROUND):

—

VMC (AIR):

—

V2 (MAX. TAKEOFF GROSS WT.):

101 KIAS

VREF (BOW + PAX + NBAA RES.):

108 KIAS

FAR 36 Noise Levels

TAKEOFF:

—

SIDELINE:

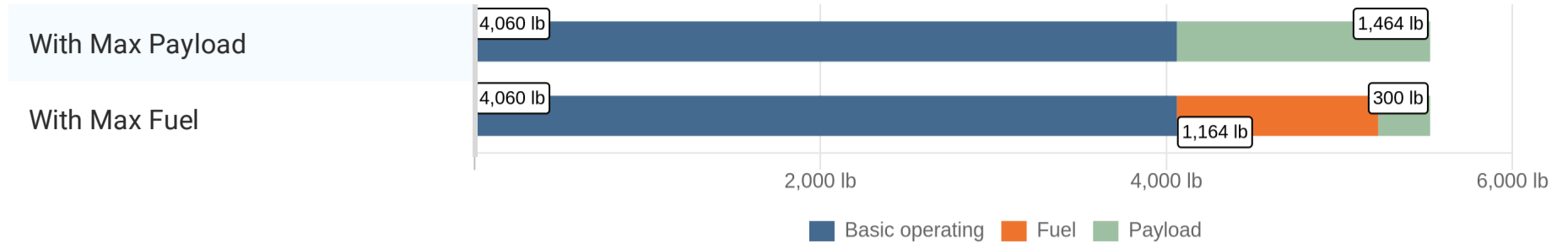
—

APPROACH:

—

3. Weight/Payload

Weight Breakdown



With Max Payload

MAXIMUM PAYLOAD:

1,464 lb

RANGE AT MAX PAYLOAD:

—

With Max Fuel

AVAILABLE PAYLOAD:

300 lb

PASSENGER CAPACITY:

2 people

RAMP WEIGHT: 5,524 lb
 MAX LANDING: 5,400 lb
 BASIC OPERATING: 4,060 lb
 USABLE FUEL: 1,164 lb

MAX GROSS TAKEOFF WEIGHT: 5,500 lb
 ZERO FUEL: 5,524 lb
 USEFUL LOAD: 1,464 lb

4. Range



Long-Range Cruise

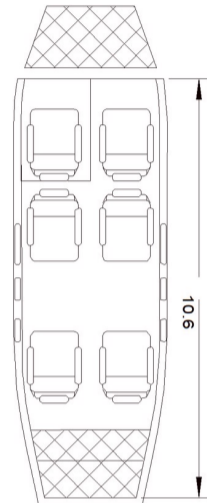
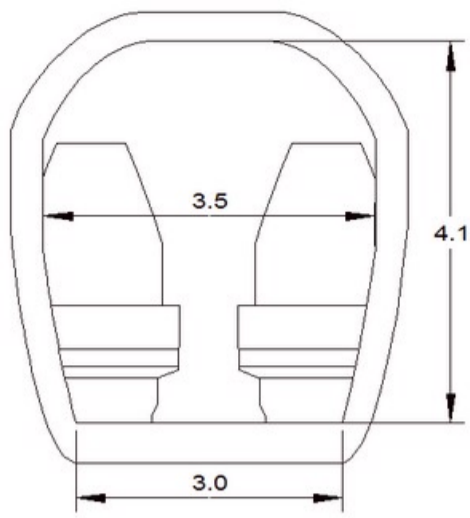
RANGE:	AVERAGE SPEED:
—	—
ENDURANCE:	PASSENGERS:
—	2 people

Maximum Cruise

RANGE:	AVERAGE SPEED:
599 nm	197 kts
ENDURANCE:	PASSENGERS:
3 hrs	2 people

SEATS FULL RANGE (30 MIN RESERVE):	156 nm
FERRY RANGE (30 MIN RESERVE):	766 nm

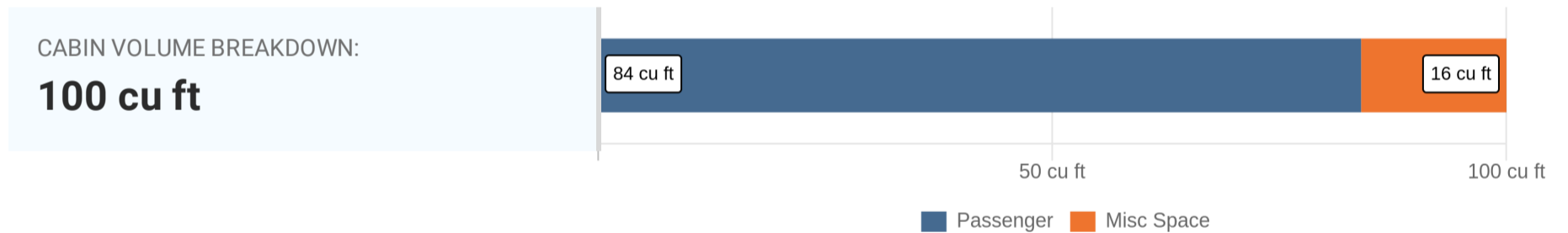
5. Interior



PASSENGERS:
5 people

CREW:
1 person

TYPICAL VOLUME PER PASSENGER:
16 cu ft/person



TOTAL CABIN VOLUME:
100 cu ft

PASSENGER AREA:
84 cu ft

MISC SPACE (GALLEY, LAV, ETC.):
16 cu ft

CABIN WIDTH:
3.5 ft

CABIN LENGTH:
10.6 ft

CABIN HEIGHT:
4.1 ft

TOTAL BAGGAGE VOLUME:
46 cu ft

INTERNAL:
—

EXTERNAL:
46 cu ft

DOOR:
9 sq ft

WIDTH (DOOR):
3 ft

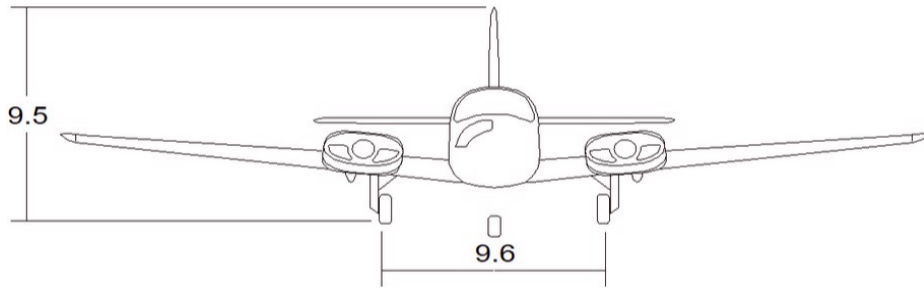
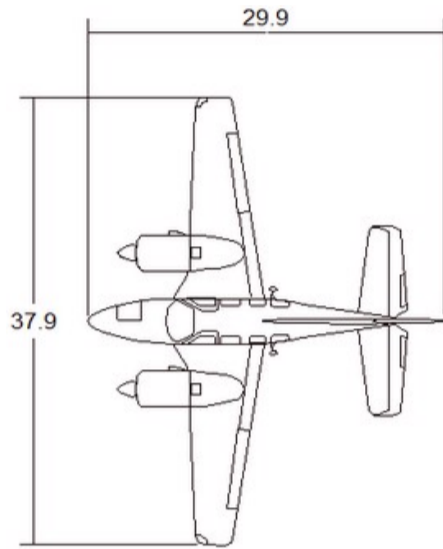
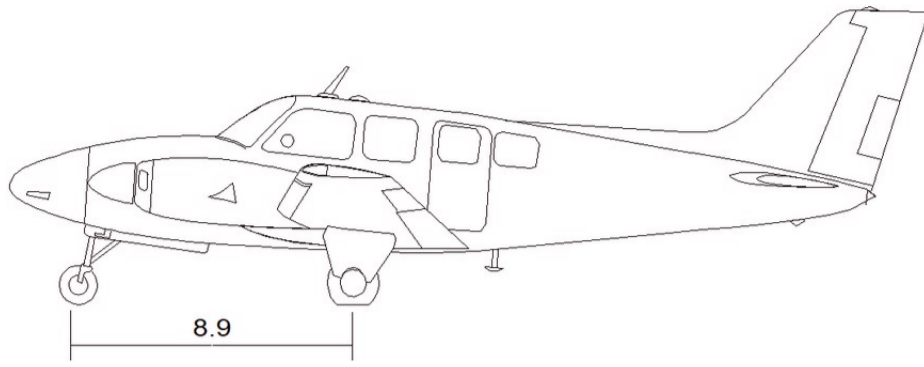
LENGTH (DOOR):
3 ft

PRESSURE DIFFERENTIAL:
—

SEA LEVEL CABIN TO:
—

CABIN ALT AT MAX CERT ALT:
—

6. Exterior



WINGSPAN:

37.9 ft

FUSELAGE:

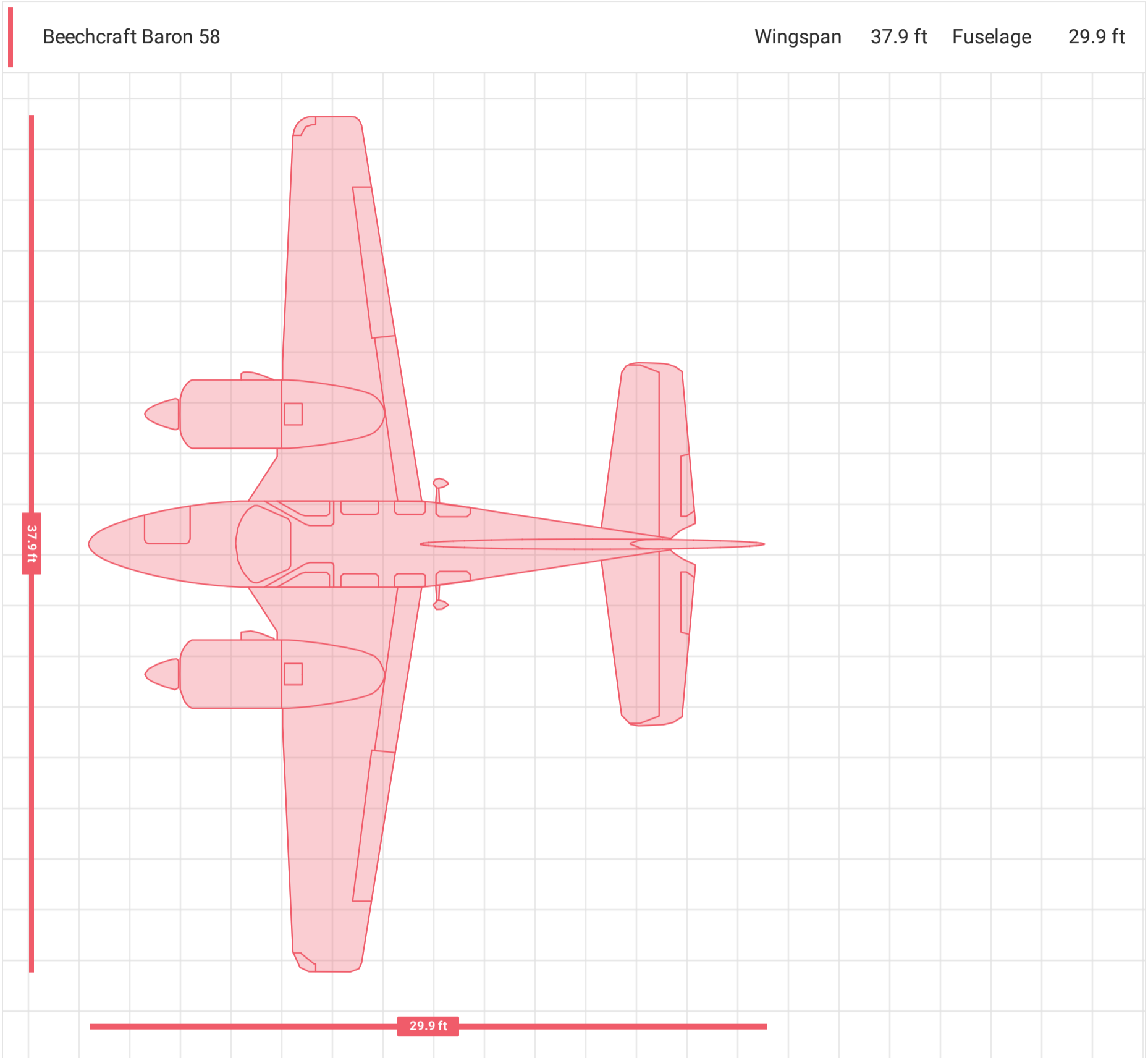
29.9 ft

POWERPLANT:

Continental Con IO-550-C 2

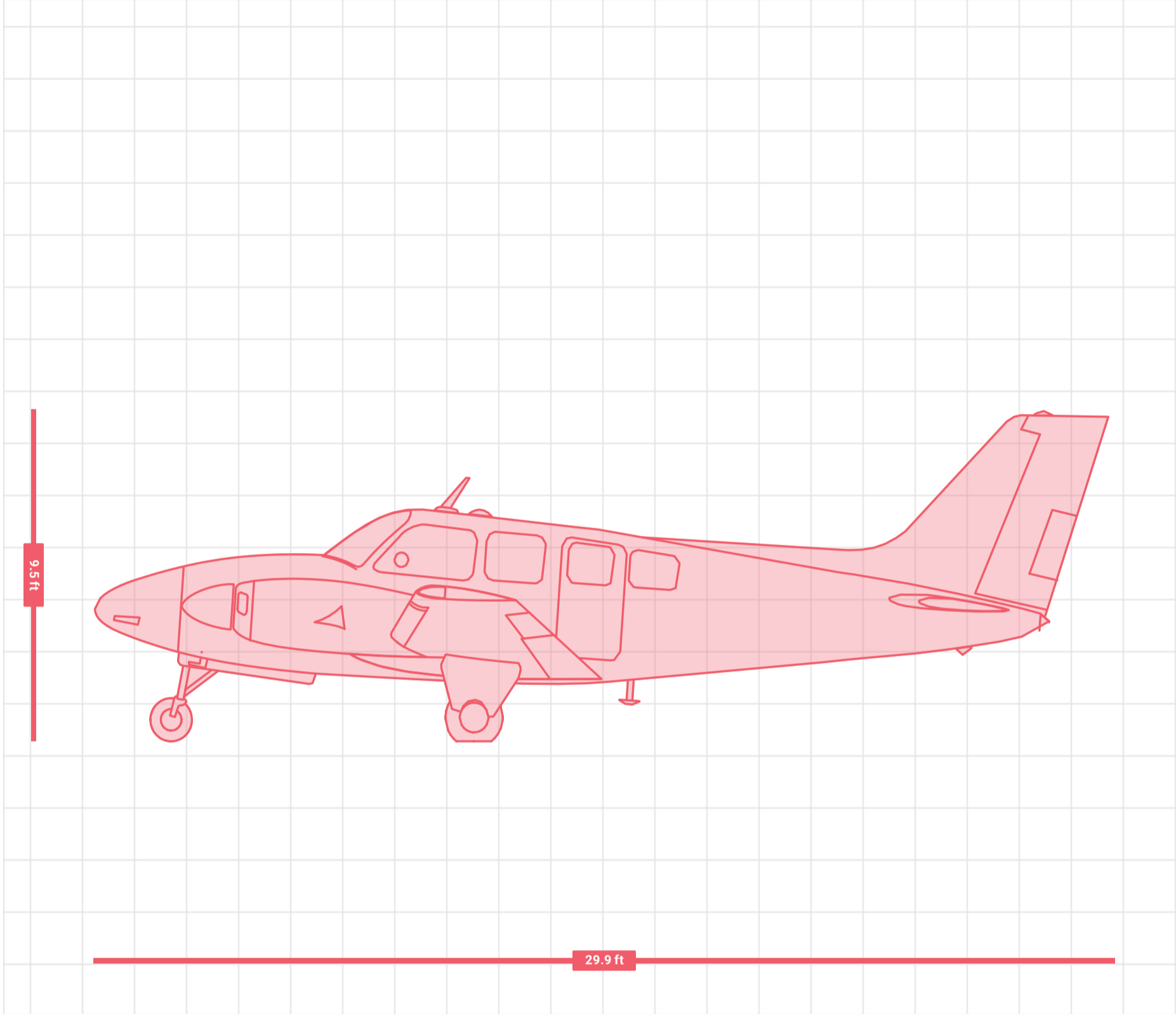
7. Overlay

Top View



Side View

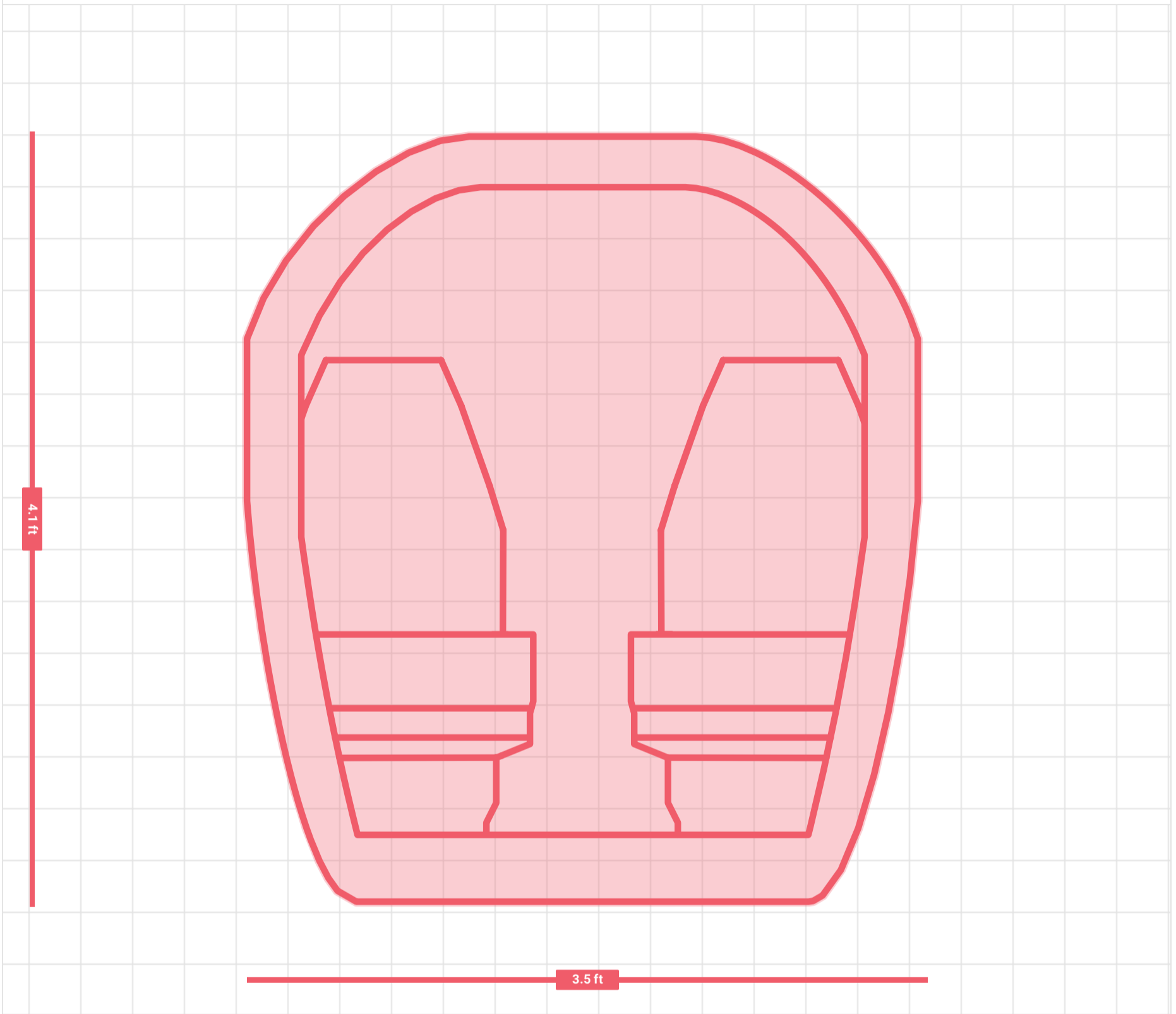
Beechcraft Baron 58	Height	9.5 ft	Fuselage	29.9 ft
---------------------	--------	--------	----------	---------



Cabin View

Beechcraft Baron 58

Cabin Height 4.1 ft Cabin Width 3.5 ft



8. Equipment

AVIONICS

—

COCKPIT VOICE RECORDER:	—
FLIGHT DATA RECORDER:	—
EICAS:	—
GROUND WARNING SYSTEM:	—
TRAFFIC WARNING SYSTEM:	—
MAINT DIAG SYS:	—
VHF 8KHZ SPACING:	—

AUXILIARY POWER UNIT

—

MEETS STAGE 3 NOISE LEVELS:	Yes
REGULATORY CERTIFICATION:	1969 (STC) Original type certificate issued 1957 for B95A
IFR CERTIFIED:	Yes
PRODUCTION:	1970 - 2005
SINGLE POINT REFUEL:	—
EXTERNAL LAV. SERVICE:	—